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09/939,117	08/24/2001	Rhod J. Jones	5681-03200	3341

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EXAMINER	
LAO, SUE X	

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/939,117	JONES ET AL.	
	Examiner	Art Unit	
	Sue Lao	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 are pending. This action is in response to the amendment filed 1/13/2005. Applicant has amended claim 3.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10/216,541. Although the conflicting claims are not identical, they are not patentably distinct from each other. For example, as to claim 1, Application No. 10/216,541 teaches a service processor for a computer system that includes a host processor (host processor) and the service processor (service processor), the service processor including a management interface (system

management functions) including a first port forming an external user interface (user interface) and a second port forming an internal console interface (console interface), the service processor being operable to provide system management functions (system management functions) within the computer system and further being responsive to external mode switching commands (external mode switching commands) received via the user interface to operate one of a management mode (management mode) in which commands received via the user interface are processed by the service processor and a console mode (console mode) in which commands received via the user interface are passed by the service processor to the console interface for processing by the host processor. See Application No. 10/216,541, claim 1, lines 1-21; claim 12; claim 13. As to claims 2-4, these are met by Application No. 10/216,541, claims 2, 5-7. As to claims 5, 7, these are met by Application No. 10/216,541, claim 11. As to claim 6, it is met by Application No. 10/216,541, claim 10. As to claim 8, it is met by Application No. 10/216,541, claims 6-7. As to claims 9 and 10, serial interfaces and UART are well known ports/interfaces, and thus it would have been obvious to use them to provide interfacing. As to claim 11, note discussion of claim 1. As to claim 12, it is met by Application No. 10/216,541, claim 12. As to claims 13-15, these are met by Application No. 10/216,541, claims 4, 14 and 13, respectively. As to claim 16, note discussion of claim 1. As to As to claims 17-18, 20-21, these are met by Application No. 10/216,541, claims 2, 5. As to claim 19, note discussion of claim 1 and Application No. 10/216,541, claim 17, It is noted that switching back is met by the switching between of Application No. 10/216,541, claims 1-17.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, ie., all limitations in claims 1-39 of the instant application.

5. Claims 1-15, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 reads as follows.

"1. A service processor for a computer system that includes a host processor and the service processor, the service processor including a management interface including a first port forming an external user interface and a second port forming an internal console interface, the service processor being operable to provide system management functions within the computer system and further being responsive to external mode switching commands received via the user interface to operate one of a management mode in which commands received via the user interface are processed by the service processor and a console mode in which commands received via the user interface are passed by the service processor to the console interface for processing by the host processor."

It is not clear which part is the body of this claim. It is also not clear to which processor (or management interface) the "first port" and "second port" are associated with. It is suggested that claim 1 is re-written with proper indentation. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. Note the format of the claims in the patent(s) cited.

6. Claims 1-14, 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (APA, page 1, lines 9-18) in view of Graf (U S Pat. 6,192,423).

As to claim 1, APA teaches (page 1, lines 12-18) a computer system that includes a host processor (host processor) and the service processor (service processor), the service processor including a management interface (monitoring and control functions) including a first port (serial network port) forming an external user interface (remote management station) and an internal console interface (host processor providing console functions), the service processor being operable to provide system management functions within the computer system (service processor for

providing management functions) and to operate one of (multiplexer enables) a management mode in which commands received via the user interface (remote management station) are processed by the service processor (service processor for providing management functions) and a console mode in which commands received via the user interface are passed (multiplexer) by the service processor to the console interface for processing by the host processor (host processor for providing console functions).

APA does not teach (1) a second port for the internal console interface, and (2) external mode switching commands.

As to (1)-(2), Graf teaches a single interface (multiplexer 16, control logic 11) for a management mode (management application running on microcontroller 12) and a console mode (host application running on CPU 30), including a second/separate port (UART 15) for an internal console interface (host application running in server, fig. 1), and responsive to external mode switching commands (DCD/DTR2/RD high/low). See col. 2, lines 25-65; col. 3, lines 4-55.

Given the teaching of Graf, it would have been obvious to use a second port for the internal console interface, and responds to external mode switching commands in APA. One of ordinary skill in the art would have been motivated to apply the teaching of Graf to APA because this would have enhanced reliability in that the system does not hang when there are software errors (col. 2, lines 8-11).

As to claims 2-4, APA as modified teaches (Graf) microcontroller (multiplexer 16 and control logic 11) including the first and second ports and control logic for implementing internal switching between the management and console modes, microcode operable to provide the internal switching between the management and console modes (control logic 11). See col. 2, lines 25-65; col. 3, lines 4-55. Generic microcode for controlling the operation of a microcontroller is inherent to the microcontroller of Graf.

As to claims 5 and 7, using flash and EEPROM memories in microcontroller / microprocessors / processors are well known. Therefore, it would have been obvious to use such memories in APA as modified.

As to claim 6, APA as modified teaches (Graf) memory holding application specific information in that the server of fig. 1 inherently includes memory to store and run host applications such as remote access service software (col. 3, lines 24-30).

As to claim 8, APA as modified teaches (Graf) the control logic (11) is operable to monitor signals received at the first port and to respond to a console mode switching command by operating in the console mode and to respond to a management mode switching command by operating in the management mode (col. 2, line 56 – col. 3, line 55).

As to claims 9, 10, APA as modified teaches (Graf) first / second serial interfaces and first / second UART ports (UART ports 13, 15,col. 2, lines 26-65).

As to claim 11, note discussion of claim 1.

As to claim 12, APA as modified teaches (Graf) port transceiver (fig. 1), external serial interface connector (connector 17).

As to claims 13, 14, APA as modified teaches (Graf) server (network server, fig. 1). Using a bus bridge / bus to connect various server components in a networked environment is well known.

As to claim 16, it is a method claim of claim 1. Note discussion of claim 1. Further, in APA as modified, the console interface is an internal interface in that it is not exposed directly to the client (fig. 1). APA as modified further teaches management mode switching command (Graf, user logs in, col. 3, lines 13-30) received via the user interface (APA, remote management station; Graf, client).

As to claim 17, note discussion of claim 2.

As to claim 18, note discussion of claim 8 for monitoring signals representative of an access sequence. Buffering input signals is well known and it would have been obvious to buffer signals received in APA as modified by Graf.

As to claim 19, it is a method claim of claim 1. Note discussion of claim 1. It is noted that steps of receiving, determining, switching and operating are the integral parts of a mode/function switching process. APA as modified further teaches switching back from a current mode to a previous mode in response to a predetermined event (reconnect to UART 13 when DCD/DTR2/RD becomes high/low). See col. 4, lines 4-7.

It would have been obvious to switch back to the console mode from a management mode in the same manner.

As to claims 20, 21, note discussions of claims 17 and 18, respectively.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Graf as applied to claim 11 and further in view of Sheikh et al (U S Pat. 6,266,721).

As to claim 15, Sheikh teaches management interfaces, including at least one of internal computer system functions: power management control; environmental monitoring; fan control; voltage rail monitoring; and system status monitoring (managing fans, power supplies, col. 4, lines 39-46).

Given the teaching of Sheikh, it would have been obvious to include the internal computer system functions into APA as modified. One of ordinary skill in the art would have been motivated to apply the teaching of Sheikh to APA because this would have provided better system availability (col. 3, lines 38-47).

8. Applicant's arguments filed 1/13/2005 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's argument that *"Applicant's APA teaches a microcontroller having a single port that serves ms a service processor. The multiplexer is used to connect an external serial port between the host processor and the service processor. Thus, APA does not teach or disclose the service processor "including a first port forming an external user interface and a second port forming an internal console interface" nor does APA teach or disclose the service processor "operating one of a management mode in which commands received via the user interface are processed by the service processor and a console mode in which commands received via the user interface are passed by the service processor to the console interface for processing by the host processor" as recited in Applicant's claim 1."* (remarks, page 7). The examiner's response is that APA meets a first port (serial network port) forming an external user interface (remote management station), as discussion in the rejection of claim 1. APA

also meet an internal console interface (host processor providing console functions). APA is not relied on to meet that the internal console interface is connected to a second port which is met by Graf who teaches using a second/separate port (UART 15) for an internal console interface (host application running in server, fig. 1). APA also teaches a console mode in which commands received via the user interface are passed (multiplexer) by the service processor to the console interface for processing by the host processor (host processor for providing console functions), as shown in the rejection of claim 1. the multiplexer is relied on to teach operate one of a management mode in which commands received via the user interface (remote management station) are processed by the service processor (service processor for providing management functions) and a console mode in which commands received via the user interface are passed (multiplexer) by the service processor to the console interface for processing by the host processor (host processor for providing console functions).

Applicant further argued that *"it is clear that Graf uses a multiplexer that is external to the microcontroller to select between a remote user using the microcontroller or the host CPU. Thus, Applicant submits that Graf does not teach or even fairly suggest a system controller including "a first port forming an external user interface and a second port forming an internal console interface," nor does Graf teach or suggest "the service processor being responsive to external mode switching commands received via the user interface to operate one of a management mode in which commands received via the user interface are processed by the service processor and a console mode in which commands received via the user interface are passed byy the service processor to the console interface for processing by the host processor" as recited in Applicant's claim 1."* (remarks, page 9). The examiner respectfully disagrees. The multiplexer of Graf being external to the microcontroller is not teaching relied on. Graf is relied on to teach a single interface (multiplexer 16, control logic 11) for a management mode (management application running on microcontroller 12) and a console mode (host application running on CPU 30), including a second/separate port (UART 15) for an internal console interface (host application running in server, fig. 1), and responsive to external mode switching commands (DCD/DTR2/RD high/low). See

col. 2, lines 25-65; col. 3, lines 4-55. It is the combination of APA and Grad, rather than APA or Graf lone, that meets the limitations of claim 1, as detailed in the rejection of claim 1.

Applicant further argued that "*Shiekh is directed toward a computer system in which "a distributed service processor network 102 may operate ms a fully self-contained subsystem within the server system 100, continuously monitoring and managing the physical environment of the machine (e.g., temperature, voltages, fan status)." see Shiekh col. 5, lines 15-19)*", and concluded that Shiekh does not teach "passed by the service processor" of claim 11. (remarks, page 10). The examiner's response is that the combination of APA and Graf meets passed by the service processor in that the multiplexer enables such passing by the service processor to the console interface for processing by the host processor (host processor for providing console functions). See discussion of claim 1 for detail.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (571) 272-3764. A voice mail service is also available at this number. The examiner's supervisor, SPE Meng-Ai An, can be reached on (571) 272 3756. The examiner can normally be reached on Monday - Friday, from 9AM to 5PM. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 9, 2005

SUE LAO
PRIMARY EXAMINER